CLAIMS

1. A low voltage power cable comprising an insulation layer with a density below 1100 kg/m³ which comprises a polyolefin comprising 0.02 to 4 mol% of a compound having polar groups, and further comprises a compound having hydrolysable silane groups and includes 0.0001 to 3 wt.-% of a silanol condensation catalyst.

2. A low voltage power cable according to claim 1, wherein the polar groups are selected from siloxane, amide, anhydride, carboxylic, carbonyl, hydroxyl, ester and epoxy groups.

3. A low voltage power cable according to claim 2, wherein the compound having polar groups is butyl acrylate.

4. A low voltage power cable according to any of the preceeding claims, wherein the polyolefin comprises 0.1 to 2.0 mol% of the compound having polar groups.

5. A low voltage power cable according to claim 1, wherein the polyolefin comprises 0.001 to 15 wt.% of the compound having silane groups.

6. A low voltage power cable according to claim 1 or 5, wherein the polymer composition further comprises a sulphonic acid or an organic tin compound as a silanol condensation catalyst.

7. A low voltage power cable according to any of the preceeding claims wherein the thickness of the insulation layer is 0.4 to 3 mm.

8. A process for producing a low voltage power cable comprising a conductor and an insulation layer, which layer comprises a polyolefin comprising 0.02 to 4 mol% of a compound having polar groups, which process comprises extrusion of the insulation layer on the conductor which is preheated to a maximum temperature of 65 °C.

9. A process according to claim 8 wherein the extrusion of the insulation layer is performed on the non-preheated conductor.

10. Use of a polyolefin comprising 0.02 to 4 mol% of a compound having polar in the production of an insulation layer for a low voltage power cable.